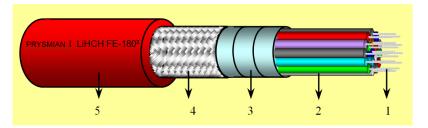


# Special copper cables



# SIGNAL and CONTROL cables

I HCH FF-180



- Stranded multiwire copper conductor
- 2 Colored LSZH insulation
- 3 Plastic Core wrap
- 4 Screens made of braided tinner copper wires
- Red (RAL 3000) LSZH sheath

## **Cable construction**

The cable consists of stranded multiwire copper conductors with glass-fiber tape and halogen free polymer material. The insulated conductors are twisted to form a pair or conductors form. The cable core consist of pairs or conductors laid up in concentric layers and a plastic tape is wrapped and a tinned copper braid is applied over the core. Then a red LSZH sheath applied on the secreened cable core.

Outer sheath thickness according to ÜBM-03-BK-028.

# **Applications**

These cables are used indoors as data transmission cables in automation systems and in the electronic control technology.

#### **Technical Data**

For cables

Installation Temperature -15°C - +70°C Storage Temperature -30°C - +70°C

Cable printing will be as below with the exception of any different requirements from the customer.

PRYSMIAN Cable type Number of pairs, cross section and meter marking <> TSEK <> with black colour

## **Electrical Characteristics**

Following values are guaranteed at +20°C

| Cross section (mm²) | Nom. insulation thickness (mm) | Max conductor resistance<br>at 20°C M.Ω.km |      | Min. insulation<br>resistance at<br>20°C M.Ω.km | Test Voltage<br>Vaa (1 minute) |
|---------------------|--------------------------------|--|------|---|--------------------------------|
| 0,75                | 0,4                            | 25,4                                       | 26,0 | 100   | 1200                           |
| 1,00                |                                | 19,1                                       | 19,5 |   |                                |
| 1,50                | 0,5                            | 13,0                                       | 13,3 |   | 2500                           |
| 2,50                |                                | 7,8  | 7,98 |   |                                |

Flammability: in accordance with IEC 60332-1 (single cable) and IEC 60331

SMoke evolution: in accordance with IEC 61034 Halogen gas generation: in accordance with IEC 60754

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# SIGNAL and CONTROL cables

LiHCH FE-180

## **Cable Core Construction**

Insulated conductors or pairs are laid up in layers according to following format and layers are stranded in the same direction.

| Number of cores | 1st layer | 2nd layer | 3rd layer |
|-----------------|-----------|-----------|-----------|
| 2               | 2         |           |           |
| 3               | 3         |           |           |
| 4               | 4         |           |           |
| 5               | 5         |           |           |
| 6               | 1         | 5         |           |
| 7               | 1         | 6         |           |
| 8               | 2         | 6         |           |
| 9               | 2         | 7         |           |
| 10              | 3         | 7         |           |
| 11              | 3         | 8         |           |
| 12              | 3         | 9         |           |
| 13              | 4         | 9         |           |
|                 |           |           |           |

| Number of cores | 1st layer | 2nd layer | 3rd layer |
|-----------------|-----------|-----------|-----------|
| 14              | 4         | 10        |           |
| 15              | 1         | 5         | 9         |
| 16              | 1         | 5         | 10        |
| 17              | 1         | 6         | 10        |
| 18              | 2         | 6         | 10        |
| 19              | 1         | 6         | 12        |
| 20              | 1         | 6         | 13        |
| 21              | 2         | 6         | 13        |
| 22              | 1         | 8         | 13        |
| 23              | 1         | 8         | 14        |
| 24              | 3         | 9         | 12        |
| 25              | 3         | 9         | 13        |

## **Colour of insulation**

Insulation colours of core will be in accordance to ÜBM-03-BK-028 or following sequence

| Number of source | Colour of insulation |             |  |
|------------------|----------------------|-------------|--|
| Number of cores  | Basic colour         | Code Colour |  |
| 1                | White                |             |  |
| 2                | Brown                |             |  |
| 3                | Green                |             |  |
| 4                | Yellow               |             |  |
| 5                | Gray                 |             |  |
| 6                | Pink                 |             |  |
| 7                | Blue                 |             |  |
| 8                | Red                  |             |  |
| 9                | Black                |             |  |
| 10               | Violet               |             |  |
| 11               | Gray                 | Pink        |  |
| 12               | Red                  | Blue        |  |
| 13               | White                | Green       |  |

| Number of cores | Colour of insulation |             |  |
|-----------------|----------------------|-------------|--|
| Number of cores | Basic colour         | Code Colour |  |
| 14              | Brown                | Green       |  |
| 15              | White                | Yellow      |  |
| 16              | Yellow               | Brown       |  |
| 17              | White                | Hray        |  |
| 18              | Gray                 | Brown       |  |
| 19              | White                | Pink        |  |
| 20              | Pink                 | Brown       |  |
| 21              | White                | Blue        |  |
| 22              | Brown                | Blue        |  |
| 23              | White                | Red         |  |
| 24              | Brown                | Red         |  |
| 25              | White                | Black       |  |

Picture of code



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